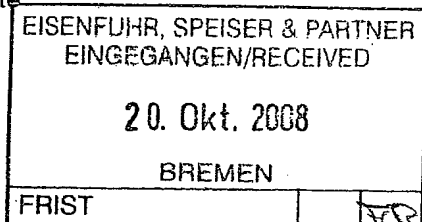


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21.10.08

Reference MA 813401EP	Application No./Patent No. 05775173.7 - 1247 / 1791367 PCT/JP2005015677
Applicant/Proprietor Panasonic Corporation	

Communication

The extended European search report is enclosed.

The extended European search report includes, pursuant to Rule 62 EPC, the supplementary European search report (Art. 153(7) EPC) and the European search opinion.

Copies of documents cited in the European search report are attached.

☐ additional set(s) of copies of such documents is (are) enclosed as well.

Refund of the search fee

If applicable under Article 9 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.



**SUPPLEMENTARY
EUROPEAN SEARCH REPORT**

Application Number
EP 05 77 5173

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
P, A	US 2005/108757 A1 (LEE KWANG-KEE [KR] ET AL) 19 May 2005 (2005-05-19) * figures 4-6 *	1-14	INV. H04N7/24 G11B20/12
A	EP 0 893 926 A (MATSUSHITA ELECTRIC IND CO LTD [JP]) 27 January 1999 (1999-01-27) * the whole document *	1-14	
A	ISO/IEC CD13818-1 (MPEG 2 PART 1) - INTERNATIONAL ORGANIZATION FOR STANDARDIZATION: "PROGRAM SPECIFIC INFORMATION, ANNEX C, ANNEX F, ANNEX H" INFORMATION TECHNOLOGY - GENERIC CODING OF MOVING PICTURES AND ASSOCIATED AUDIO INFORMATION. PART 1: SYSTEMS. DRAFT INTERNATIONAL STANDARD ISO/IEC DIS 13818-1, GENEVA, ISO, CH; 1 January 1994 (1994-01-01), page 36-45, WITH ANNEXES C, F, H, XP002498323 * page 36 - page 45 * * page 92; table c2 *	1-14	
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			TECHNICAL FIELDS SEARCHED (IPC)
			H04N G11B
Place of search		Date of completion of the search	Examiner
The Hague		3 October 2008	Giannotti, Pantaleo
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 77 5173

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-10-2008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005108757	A1	19-05-2005	NONE
EP 0893926	A	27-01-1999	CN 1206992 A 03-02-1999
		DE 69822377 D1	22-04-2004
		DE 69822377 T2	24-02-2005
		ES 2216214 T3	16-10-2004
		US 6535530 B1	18-03-2003

The examination is being carried out on the **following application documents**:

Description, Pages

1-8, 10-28 as originally filed
9 filed with entry into the regional phase before the EPO

Claims, Numbers

1-4, 6-13 as originally filed
5, 14 filed with entry into the regional phase before the EPO

Drawings, Sheets

1/18-18/18 as originally filed

The following documents are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

- D1: EP-A-0 893 926 (MATSUSHITA ELECTRIC IND CO LTD [JP]) 27 January 1999 (1999-01-27)
- D2: ISO/IEC CD13818-1 (MPEG 2 PART 1) - INTERNATIONAL ORGANIZATION FOR STANDARDIZATION: "PROGRAM SPECIFIC INFORMATION, ANNEX C, ANNEX F, ANNEX H" INFORMATION TECHNOLOGY - GENERIC CODING OF MOVING PICTURES AND ASSOCIATED AUDIO INFORMATION. PART 1: SYSTEMS. DRAFT INTERNATIONAL STANDARD ISO/IEC DIS 13818-1, GENEVA, ISO, CH, 1 January 1994 (1994-01-01), page 36-45, WITH ANNEXES C, F, H, XP002498323
- D3: ETSI En 300 468 v.1.5.1 (2003-5) Digital Video Broadcasting (DVB); Specification for Service Information (SI) in DVB systems pages 26 to 69 XP002998840

1. The present application does not meet the requirements of Articles 84 EPC, because the claims are not clear.

1.1 The present application has currently independent claims directed to a multiplexer (claim 1), a recording medium (claim 6), a decoder (claim 8), a multiplexing method (claim 11), a computer program to implement said multiplexing method (claim 11), a decoding method (claim 13), and a computer program to implement said decoding method (claim 14).

1.2 The present application concerns the structure of a MPEG Transport Stream. According to the MPEG standard (see document D2, and also D3), the maximum number of ES_descriptors is 255, because the ES-descriptor tag consists of 8 bits.

1.3 The standard prescribes that descriptors are data structures whose format begins with an 8 bit tag value (descriptor_tag), said tag value being followed by an 8 bit field (descriptor_length) specifying the number of bytes of the descriptor immediately following said field. All descriptors have a common format: tag (8 bits), length (8 bits), data body. The descriptor itself, or the set of consecutive descriptors, is always preceded by a 12 bit field (program_info_length; ES_info_length) which specifies the number of bytes of the descriptor or descriptors immediately following said field. In this way, a decoder would always be capable of decoding, avoiding ambiguity of interpretation of the stream.

1.4 The standard foresees a mechanism to extend the number of descriptors (see D2, page 92). One tag is reserved as a composite descriptor, to indicate that the data body consists of one or more sub-descriptors. All sub-descriptors have a common format: sub_descriptor_tag (8 bits), sub_descriptor_length (8 bits), data body.

1.5 Consequently, the prior art shows the adoption of a hierarchy in a descriptor, and such a concept is therefore not new.

1.6 Deviating from the standard, the present application teaches to suppress the sub_descriptor_length (8 bits), and to fix the size of the data body of the sub-descriptors (see present application, figure 5 and sections 22). However, this creates a need for a mechanism to enable the decoder to keep on decoding, or to decode as many sub-descriptors as possible, even if a specific sub_descriptor tag, and

consequently the length of the related subdescriptor, is not known to said decoder (see present application, section 27). The application presents a technique to overcome such a drawback.

1.7 The object of the present application is to achieve back compatibility with the standard, when such a new arrangement of subdescriptors is used (see present application, section 38).

1.8 The claims as presently formulated do not specify the fixed size structure of said subdescriptors, nor their relationship with the structure of the descriptor incorporating them, nor the presence of the descriptor length field (which is essential to enable the decoder keep on decoding) specifying the number of bytes of the descriptor immediately following said field. Consequently, contrary to Article 84 EPC, the claims do not define clearly the essential features of the subject-matter, necessary to achieve the object.

1.9 Moreover, the order in which the features of the independent claims is presented is in itself confusing, contrary to Article 84 EPC.

1.10 Furthermore, when one compares the claims directed to the multiplexing, to the decoding, and to the storage medium, one sees that the underlying data structure is defined in incoherent manner, contrary to Article 84 EPC.

2. In order to overcome the foregoing objections, the independent claims should be reviewed and drastically amended, so as to incorporate a clear definition of the invention. Failure to do so will lead to refusal of the application under Article 97(2) EPC.

2.1 Should the Applicant file amended claims, the above mentioned objections and considerations should be taken into account together with the following notes:

2.2 In order to expedite the procedure the Applicant is requested to indicate in the reply the location in the application as originally filed of the passage forming a basis for the amendment.

2.3 The new independent claims should be filed taking account of Rule 43(1) EPC. To meet the requirements of Rule 43(1) EPC the independent claims should be properly cast in the two part form, with those features which in combination are part of the prior

art (see document D2) being placed in the preamble.

2.4 The dependent claims should be properly reviewed in the light of the necessary amendments to the claim from which they depend and harmonized accordingly.

2.5 Reference signs in parentheses should be inserted in the claims to increase their intelligibility, Rule 43(7) EPC. This applies to all of the claims.

2.6 According to Rule 42(1)(b) and (c) EPC, the description must be brought into conformity with the new claims to be filed. To meet the requirements of Rule 42(1)(b) EPC, the document D2 should be identified in the description and the relevant background art disclosed therein should be briefly discussed as in paragraph 1.3-1.5 above. Care should be taken during revision, especially of the introductory portion including any statements of problem or advantage, not to add subject-matter which extends beyond the content of the application as originally filed, Article 123(2) EPC.

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